

Title (en)  
METHOD FOR THE HYDROGENATION OF AROMATIC NITRO COMPOUNDS

Title (de)  
VERFAHREN ZUR HYDRIERUNG VON AROMATISCHEN NITROVERBINDUNGEN

Title (fr)  
PROCÉDÉ D'HYDROGÉNATION DE COMPOSÉS NITROAROMATIQUES

Publication  
**EP 4021885 A1 20220706 (DE)**

Application  
**EP 20760487 A 20200827**

Priority  
• EP 19194563 A 20190830  
• EP 20179290 A 20200610  
• EP 2020073991 W 20200827

Abstract (en)  
[origin: WO2021037990A1] The present invention relates to a process for the preparation of an aromatic amine by hydrogenation of an aromatic nitro compound, comprising the following steps: (I) providing a copper tetramine salt-based impregnation catalyst, in particular an impregnation catalyst obtainable by the incipient wetness method, comprising a metal or metal oxide on a support as a hydrogenation catalyst. At least metallic or oxidic copper (in particular CuO) is present and the mole fraction of Cu based on all metals present is in the range of 0.75 to 1, and wherein the support comprises shaped silicon-dioxide shaped bodies or silicon-carbide shaped bodies; (II) optionally, activating the hydrogenation catalyst by treating with hydrogen in the absence of the aromatic nitro compound; and (III) reacting the aromatic nitro compound with hydrogen in the presence of the, optionally activated, hydrogenation catalyst to obtain the aromatic amine.

IPC 8 full level  
**C07C 209/36** (2006.01); **B01J 23/72** (2006.01); **C07C 211/46** (2006.01)

CPC (source: EP KR US)  
**B01J 23/72** (2013.01 - KR US); **B01J 37/0201** (2013.01 - KR US); **B01J 37/08** (2013.01 - KR US); **C07C 209/36** (2013.01 - EP KR US); **C07C 211/46** (2013.01 - KR)

C-Set (source: EP)  
**C07C 209/36 + C07C 211/46**

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2021037990 A1 20210304**; CN 114286812 A 20220405; EP 4021885 A1 20220706; EP 4021885 B1 20240612; JP 2022546362 A 20221104; KR 20220053569 A 20220429; US 2022289662 A1 20220915

DOCDB simple family (application)  
**EP 2020073991 W 20200827**; CN 202080060879 A 20200827; EP 20760487 A 20200827; JP 2022512745 A 20200827; KR 20227006144 A 20200827; US 202017637173 A 20200827